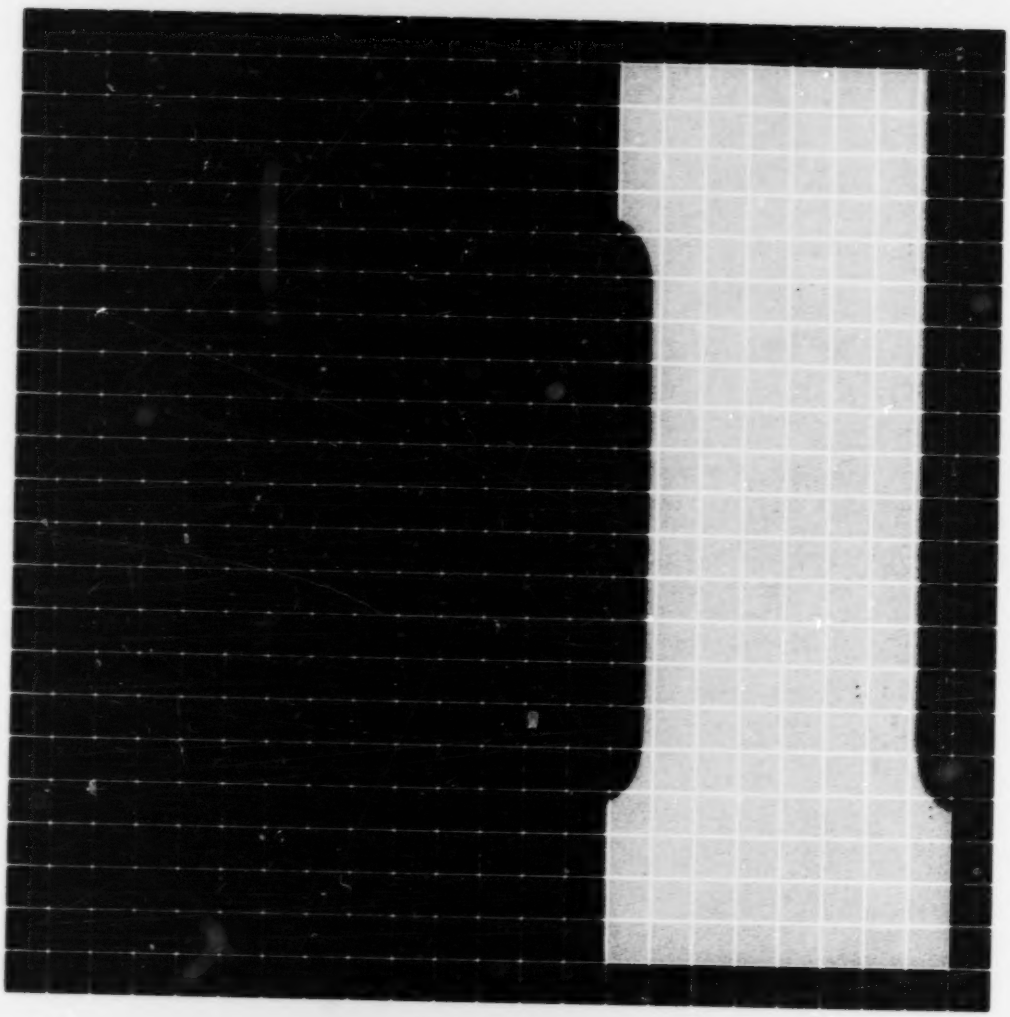
Blueprint for Waste Management in Ontario

Appendix 1

Waste Management Consultation Session Report



Ontario

Ministry of the Environment

Hon. Keith C. Norton, Q.C., Minister

Gérard J. M. Raymond Deputy Minister

CELEBRATING TOGETHER 1784 ONTARIO 1984

This is one of 11 appendices to the Blueprint for Waste Management. A complete list is presented on the inside of the back cover.

For copies of the Blueprint or other appendices, please contact:

Mr. T.D. Armstrong
Blueprint Co-ordinator
c/o Waste Management Branch
Ontario Ministry of the Environment
135 St. Clair Avenue West
Toronto, Ontario
M4V 1P5

APPENDIX I
WASTE MANAGEMENT CONSULTATION SESSION REPORT

The Ministry of the Environment sponsored a consultation session, February 23rd and 24th, 1983, in Waterloo, Ontario to facilitate input to the Blueprint. It was attended by 58 people from throughout the Province, representing government, industry, environment and citizens' groups and the academic community. This report contains a summary of the views expressed at the consultation session.

The Blueprint for Waste Management sets out a number of key objectives. One of the most important is participation and input from all interested groups, organizations, municipalities and industries across the Province. This report is an example of the type of input the Ministry is hoping to obtain. Many concerns raised at this session have been addressed in the Blueprint. Through such dialogue a definitive program can be put into practice to serve successfully the people of Ontario.

This paper contains recycled fibre.

Final Report

of

Waste Management Consultation Session

Compiled by: John Jackson
Barry Randall
Scott Slocombe
Phil Weller

Waterloo Public Interest Research Group
Rm. 217,
Campus Centre,
University of Waterloo,
Waterloo, Ontario
N2L 3G1

Summary

During the one and a half day waste management consultation, conference participants devoted the majority of their time to the workshop discussion groups. Four topics: Recycling, Reuse and Reduction; Perpetual Care and Compensation; Production and Classification; and Approvals, Controls, Standards and Regulations were discussed. For these workshop sessions some basic principles of waste management received overwhelming support from all those attending the conference. The following sentiments were emphasized by the participants.

Recycling, Reuse and Reduction

There is an absolute need for the evaluation and establishment of "true costs" of disposal at all waste management facilities. In addition, education of the general public, industry and municipalities should be undertaken to encourage recycling. The provincial government should actively establish a favourable climate for the adoption of recycling, reduction and reuse technologies. To create an environment for greater use of recycling, reuse and reduction the province could focus on developing and stabilizing markets, providing financial incentives, technological assistance, packaging standards and assist in the establishment of residential curbside pickup.

Perpetual Care

There was an overriding sentiment that there needs to be a detailed plan for closure and perpetual care before new waste management facilities become operational. Discussion of old and existing sites focused on four basic issues: 1) ongoing monitoring; 2) cleanup of problem sites; 3) funding of remedial action; and 4) compensation.

Agreement arose from the workshop groups that there needs to be a special fund established to remedy problems at closed or currently in use facilities. This fund was to be funded by the users of existing waste disposal facilities, both public and private. The fund was not seen as being a substitute for the site owner's liability. It was suggested that an additional fund for compensation of "victims" be established.

Production and Classification

A clear message emerged that there was a need for greater information availability on the types and volumes of wastes generated. Despite an acceptance of this principle, there was a concern that the need for publicly available information should be reconciled with the need for corporate confidentiality.

It appeared generally accepted that information on wastes leaving a plant gate should be publicly available.

Approvals, Controls, Standards and Regulations

One sentiment expressed by the participants was that the public must be involved in waste management decisions at the preliminary stages. In addition, participants expressed the need for clear and consistent enforcement of legislation. The Environmental Assessment Act was singled out as needing consistent use. Violations of regulations and standards were seen as requiring more stringent action such as fines or revocation of licenses.

Concluding the conference a final plenary was held where the participants emphasized their desire to be involved in an ongoing way with the development of the waste management blueprint. In addition to providing those who participated in this conference with a copy of the blueprint, the attendees wanted to see the blueprint widely distributed to all sectors of society. It was also suggested that a followup conference be held with the same group of people who attended this meeting.

TABLE OF CONTENTS

	Page
Summary	i
Introduction	1
Waterloo Region Case Study Presentations	3
Introduction	3
Steve Menich	4
Gerry Thompson	5
Nyle Ludolph	6
Jack McGinnis	7
Jane Gorman	8
Transitional Address - Murray Haight	10
Workshop Sessions - Introduction	14
- Recycling, Reuse, Reduction	15
- Perpetual Care and Compensation	19
- Production and Classification	22
- Approvals, Controls, Standards and Regulations	24
Final Plenary	29
Appendix A Organizing the Conference	31
B Workshop Questions	35
C Summary of Conference Evaluation Forms	39
D Conference Attendees	43

Introduction

The consultative session which this report details took place February 23rd and 24th, 1983 at the Conestoga Inn, Kitchener, Ontario. The session's purpose was to provide the Ontario Ministry of the Environment (MOE) with "background input to the development of a waste management blueprint for Ontario". Fifty-eight people from throughout the province representing all levels of government, business, industry, environmental and citizen's groups and the academic community attended.

The conference began with a plenary session that included presentations by people involved in waste management in the Waterloo Region. Their presentations and a transitional address were used as a reference point for discussions that followed. Most of the time at the consultation session was spent in workshops where everyone had the opportunity to present their concerns and ideas. The following workshop topics were discussed: Production and Classification of Wastes; Perpetual Care and Compensation; Recycling, Reuse and Reduction; and Approvals, Controls, Standards and Regulations. After the workshops, a closing plenary session was held to discuss opportunities for continuing input into the development of the waste management blueprint.

The ultimate purpose of this report is to provide a written record of the conference for the reference of the MOE, the participants and the organizers.

WPIRG wishes to acknowledge the advice and assistance received from the following people: Bill Allan, Diane Damman, George Francis, Terry Grignon, Murray Haight, Randy Hodge, Sally Lerner, and Andy McCammon.

Waterloo Region Case Study Presentations

In order to provide a local perspective on waste management, five people from the Region of Waterloo were asked to relate some of their experiences on the issue. The Waterloo Region was recognized as an area which had utilized a variety of innovative waste management techniques and would therefore provide a good example of how the issue is being addressed in a particular region.

Case study presentations were given by individuals drawn from a variety of backgrounds.

Presentations were made by:

- Steve Menich, Kitchener Chamber of Commerce

- Gerry Thompson, Engineering Department, Regional Municipality of Waterloo

- Nyle Ludolph, Laidlaw Waste Systems Ltd., Kitchener

- Jane Gorman, Citizen Representative on the Kitchener-Waterloo Waste Management Committee

All five presenters gave accounts of their own waste management experiences and helped to provide a starting point for the workshop sessions which followed. Before preparing their presentations the speakers were asked to consider three general questions:

1) What are the dimensions of the waste management problem?
2) What has been learned from the problems and what ideas have worked for solving them - including how success has been defined?
3) What is the role of the province's waste management legislation, regulations, policies and programs in the local waste management situation and how can these be improved and altered?

The following is a summary of the case study presentations.

Steve Menich - Kitchener Chamber of Commerce

Mr. Menich began by outlining the activities of the Chamber of Commerce with regard to waste management. He provided an overview of events relating to major waste management projects which the Chamber has undertaken.

The first of these began in 1980 when the need for a waste management committee of the Chamber was recognized. This need was identified because various businesses and industries were generating wastes which could not be disposed of at municipal sites.

In April of 1980 the Chamber sponsored workshops to determine the magnitude of the hazardous waste problem, what could be done to resolve the problems, and to provide a forum for initiating cost effective regional solutions. Ideas and concerns raised at this workshop led to a letter to the Regional engineering department with the following recommendations for a three-phase project:

1) Assess the potential and feasibility for regional waste management sites including technology requirements, capital costs and liaison needs.
2) Establish a pilot demonstration project - to examine collection, treatment and monitoring requirements of the region.
3) Establish full-scale facility.

Between July 1980 and February 1981 this proposal did not proceed because of expected development at the proposed South Cayuga facility and fears about the results of a waste inventory and possible environmental investigations.

However, a steering committee was eventually brought together by the Chamber to get the waste management committee moving. This meeting developed the suggestion that regional problems of waste management required solutions beyond city responsibility. During February to May 1981, discussions were held with the Regional, Provincial and Federal governments to establish means of addressing recognized waste problems. With joint funding from the Chamber and the three levels of government, a consultant was hired to undertake an inventory of liquid and special waste in the Region of Waterloo.

The main results of this study were:
- 653 waste types were identified
- 28% of industries surveyed had no special waste
- some industries were not aware of all the wastes they generated and possible treatment options

With these study results in hand the second phase of the project was begun. For this project Resource Integration Systems (a Toronto consulting firm) was employed to conduct an assessment

of the barriers to implementation of efficient waste management systems. This project will also involve assisting local industry in adopting proper disposal methods.

It is expected that this project could provide a model for other communities.

In summary Mr. Menich remarked that there is a need for non-technical data and information on waste management. There is a need for communication with people and politicians for changing poor waste management strategies. "We must not be afraid to learn more," said Mr. Menich. In addition, fair legislation is needed to make the generator responsible for waste management and the province should set objectives with reasonable time for achievement.

Concluding, Mr. Menich remarked that sound waste management requires co-operative input from many sections of the population.

Gerry Thompson - Regional Municipality of Waterloo

The responsibilities for receiving, dumping and disposing of waste are vested with the regional government outlined Mr. Thompson. He noted that the responsibilities for collection rests with each area municipality. The landfills themselves however are operated by the region. As elsewhere "Landfill life" is a key issue, but in Waterloo through energy from waste plants, use of recycling technology and source reduction, the regional government hopes to extend greatly the landfill life and improve the overall waste management system.

One of the important aspects of the region's waste management system is the Waste Management Advisory Committee, commented Mr. Thompson. This committee, composed of ten representatives from citizens groups, industry, academic and government interests, makes recommendations on waste management projects to regional council. Waste management projects are usually discussed and refined by this committee. Among the projects this committee has helped develop is the landfill gas utilization project with Bestpipe in Kitchener, an energy from waste project with B. F. Goodrich and various recycling projects.

The region also maintains good liaison with the Chamber of Commerce with whom the Special and Liquid Waste Study was undertaken. This survey of 455 industries found that most waste materials are being handled in environmentally acceptable methods. At the same time it was found that 330,000 litres of liquid waste were posing a threat because they were disposed of improperly or simply held in long-term storage. Most firms using unsafe disposal methods are doing so because they don't know any better and are not convinced there is a danger, outlined Mr. Thompson.

Mr. Thompson provided details on two of the innovative waste management projects the region is involved in.

Landfill Gas Project - This $600,000 jointly funded project involving three levels of government and Bestpipe Ltd. extracts methane gas from the Kitchener landfill. Fifteen wells on the site collect the gas which is combusted to produce steam which in turn provides power to be used in the production of concrete pipes.

Energy from Waste Project - A feasibility study for this project, which will involve combustion of solid waste for steam generation, has now been completed. This process will, when in place, incinerate a portion of the 840 tons of solid waste generated each day in the Waterloo Region.

The advantages of the project, as noted by Mr. Thompson, are:

- Waste Haulage saving
- Extending landfill site life by 25%
- Reduce equipment cost of landfill
- Job creation
- Produce energy saving

In summary, Mr. Thompson noted that the success of waste management activities in the Waterloo Region has been due, in part, to the "lack of resistance to new ideas and programmes" and the excellent co-operation between federal, provincial and municipal governments and industrial groups.

Nyle Ludolph - Laidlaw Waste Systems Ltd.

Mr. Ludolph opened his presentation by expressing two main concerns:

1) The Waterloo Region is fortunate to have access to landfill sites, because in many regions Laidlaw trucks have to travel as far as 55 miles to reach an appropriate landfill site.

2) In order to reduce dependence on landfills, reduction, reuse and recycling technologies must be used, however, there will always be a need for landfills.

Following these main themes, Mr. Ludolph provided a number of suggestions which would allow a community to more effectively address its waste management requirements.

Specifically, the cost of landfill disposal must reflect the "user pay" concept. The real costs of landfill have to be charged. These costs include:

- operation at site
- supervision of site

- land costs
- consulting fees
- engineering
- administration
- hearings
- replacement fund
- liability fund

Mr. Ludolph went on to outline a pilot project being carried on by Laidlaw that involves collection of source-separated materials (newspapers, bottles, cans). This pilot project has proven that residential source separation will work if it is convenient, outlined Mr. Ludolph.

In addition to emphasizing this point he went on to discuss other issues he felt were significant. These involved:

- Instituting a system of additional fees to cover the costs of monitoring closed landfills.
- Making aluminum can recycling viable.
- Undertaking public education on waste creation.
- Imposing fines on problem cases or individuals.

As an industry representative, Mr. Ludolph was concerned about having enough space to dispose of the vast quantities of waste generated each day within the Region of Waterloo. He noted, however, that through a true cost "user pay" system the landfill option would be less attractive to industry and recycling, reduction alternatives would become economically attractive. The inherent hazards of landfill would then be reduced.

Jack McGinnis - Resource Integration Systems

Both industry and the general public want more use of recycling, reduction and reuse technology, outlined Mr. McGinnis. He noted, however, that based on ten years experience, many people believe these ideas will not work. Mr. McGinnis commented that the key barriers to the implementation of these waste management options are:

1) economic viability
2) the lack of across-the-board participation and
3) lack of support for recycling activities.

To overcome these barriers, the key is to undertake research and development and the active promotion of the idea that these programs are necessary.

Mr. McGinnis outlined two projects his Toronto based consulting firm is involved with in the Waterloo area. The first of these is a residential recycling project undertaken with Laidlaw Waste Systems. This project used a number of innovative ideas:

1) door to door promotion
2) monthly newsletter to residents
3) the provision of "We Recycle" containers for curbside collection.

As a result of this active approach, participation in the recycling program jumped from 45% to 75% of residents in two years of operation.

Mr. McGinnis, in the summary to his discussion of this project, outlined the following problems of residential recycling projects:

- market viability
- the unclear role of provincial regulation and ill-defined corporate responsibility for recyclability of product, i.e. containers (design and material)
- the negative history of recycling

The second project RIS is currently involved in is the industry study to understand and overcome the barriers to industrial waste recycling and reduction. The highlights of an industry survey on recycling and reduction were:

- 60% of respondents said the main issue in recycling is economics
- 40% said socio-environmental concerns would determine their use of recycling technologies

A further list of factors, given marginal profit motives, would influence a company's adoption of improved waste management options:

		Response Rate
1)	competitive edge (i.e. threat of shutdown for non-compliance)	50%
2)	community support/pressure	32%
3)	general environmental concern	48%
4)	labour force support	30%
5)	available government support	
6)	access to information	

Mr. McGinnis concluded by noting that industrial people are also part of the community, and more available information will promote an increased general awareness of the issues, and hopefully the wall between the general public and industry will be broken down.

Jane Gorman - Waste Management Advisory Committee - Waterloo Region

In her presentation Mrs. Gorman outlined a number of ways the citizen could become actively involved in community waste management activities. Four different areas of involvement were outlined.

The first was membership on a Waste Management Advisory Committee. In Waterloo, there is a Committee made up of a small number of interested citizens brought together to examine solutions to waste management problems. The activities of this group include literature searches, landfill site tours, film reviews, attendance at hearings and exploration of ways of providing public input to the waste management process.

The benefits from this type of activity include the sharing of ideas on waste management issues, including input from academic, industrial and political circles and the increase in information available to the general public.

The second area of involvement described was with Protest, Protect and Prevention groups. Concerning themselves with specific problems and immediate solutions, these groups generate a great deal of publicity about a variety of waste management issues. It was suggested that they should become more actively involved in the "problem solving process".

Thirdly, recycling groups, i.e. boy scouts, volunteer groups, school programs, Mennonite groups, are accessible to most people in the community. Many of these groups require outside assistance in the form of: 1) more advertising, 2) more drop off centres, 3) more frequent collection of recyclable material, in order to be successful.

Waste reduction and recycling by individuals was the final type of involvement outlined by Mrs. Gorman. The basic assumption here is that people will recycle if they are encouraged to do so. This encouragement could involve:

1) cash incentives for recycling
2) visible use of recycled products
3) further corporate responsibility
4) more recycling education in schools
5) standardization of supermarket containers
6) limit to curbside waste
7) use of glass containers for milk and juice

Mrs. Gorman's vision of the future involves a variety of innovative waste management techniques which would promote the ideas listed above.

In conclusion, "All that is thrown out is not garbage". It is hoped that the environment of the future will be "as free as possible" of all harmful wastes. To ensure this, efforts which are being presently initiated will have to continue.

Note: Full texts of the presentation by Jane Gorman and Gerry Thompson are available on request from WPIRG.

Transitional Address - Murray Haight
Professor of Urban Planning, University of Waterloo

A COMPREHENSIVE FRAMEWORK FOR WASTE MANAGEMENT

Good Afternoon

I have been invited by the organizers of this workshop to present what has been called in your timetable a transitional address. My dictionary defines a transition as a "passing from one state, stage, place or subject to another." I will address the transition of subject matter, i.e. how might we best utilize the materials presented in the case studies, and combine the diversity of expertise and experiences each of you brings to this gathering?

The challenge was to decide upon the appropriate content of information to consider. Some of the concerns I had at this point were that I should strive to minimize presenting my attitudes, concerns, cultural biases and what-not. The opportunity for me to share these are best left to the workshops.

The solution to my dilemma is contained on the sheet of paper which everyone should have a copy of (which follows this address). What I propose to do in the next few minutes is to briefly elaborate upon the points covered on it.

As I go through this overview I would ask that you should begin to attempt the application of this framework, and to do so by considering some of the points raised in the case study. We would also ask that you take this sheet into the workshops where hopefully it will be of assistance.

How do we begin to address a topic as complex as waste management? How do we focus the views of the diversity of persons directly or indirectly involved and/or affected by waste? How do we ensure that the ideas, values, concerns and opinions of the individual are shared together with the voices arising from industry and government?

Let us begin by first of all looking at who the "actors" are of a waste management process. The sheet lists three principal actors. Not surprisingly they are:

(1) GOVERNMENT: exists at several levels. Federal, Provincial and Local. In many parts of Ontario local government is composed of two tiers: Regional and Municipal.

(2) INDUSTRY: may be distinguished as shown here by using activity as a criteria. It is convenient to recognize Extraction, Manufacture, Transportation, Recovery/Disposal operations.

(3) PUBLIC: consists of Interest Groups (e.g. WPIRG, Pollution Probe, CELA, Conservation Council of Ontario, FON, FOE).

Citizen Action Groups (e.g. Concerned Citizens of Stouffville, CRAW, HOPE, CAMSOP).

Individuals - you and I. The homeowner, the scientist, the production worker.

I realize that there is some arbitrariness to this list of actors, and difficulties arise as one begins to slot individuals into a specific category. For example, more often than not an individual is likely to be a member of the public as well as one of either government or industry.

The second component of this framework lists the "process of waste management". The term management has been selected on the basis that it encompasses all ongoing activities which in turn involve human responsibility.

The Process component is made up of three major activities:

(1) PLANNING

(2) IMPLEMENTATION

(3) MONITORING

and like the list of actors just described, it is convenient and sometimes necessary to add additional listings which describe the activities.

Under PLANNING we might list several sequential steps:

- Definition of the Problem, Setting of Goals and Specifying Objectives
- Information Gathering; Research/Design
- Analysis and Forecasting
- Evaluation of Outcomes, Looking at Alternatives

IMPLEMENTATION consists of:

- Authorization (Approvals, Public Hearings, Regulations, Permits)
- Construction
- Operation

and an important, often overlooked aspect, Termination (Abandonment/Reclamation).

MONITORING consists of:

- Surveillance
- Inspection
- Enforcement

The subcategories under Implementation could be expanded to include such terms as regulation, legislation, prosecution,

compliance, compensation, negotiation, compromise, bargaining, power, influence, co-operation, co-ordination, fines, penalties, work-stoppages and others.

The last aspect of the framework I've termed the "keys to operation". These are, if you like, the fundamentals, the essentials, the basic ingredients upon which the remainder of the framework exists. Three keys are listed (there may be more):

(1) COMMUNICATION: Communication includes both content and utilization. Content is whether or not it is scientific information, values, perceptions or even the lack of information. Utilization includes how the information is used and transmitted. We can speak of information sharing, education, the role of information in decision-making, or during the authorization process, construction, the generation of information, evaluation of information and use.

(2) RESPONSIBILITY: This may be the roles assumed by the various actors as directed towards the process components. We may think of it in a specific instance and look at public integration into decision-making from the point of view of sharing of views as well as helping to make a decision which is oftentimes based on striving to achieve a balance between the benefits and costs. In some instances the consequences of various alternatives are not fully known, whence the public or society and its set of values or 'cultural biases' form a much needed value judgement. We can also consider the responsibilities traditionally followed throughout the management process and at the same time expand and suggest what should be done.

(3) EVALUATION: In looking at the total framework, evaluation is based upon the application of some or all of the following criteria: Efficiency, Effectiveness, Responsiveness, Equity, Flexibility, Comprehensiveness as well as a list of others. The application of this key may be not only to the process of management and hence require the identification of the actors involved, the degree of rigour and the criteria to be used, but it should also be applied to the total process.

Now I could go on and begin to elaborate upon this framework by making specific reference to some of the points already raised in the case study or in relation to what is likely to occur in the workshops. However, if I go back to my opening statement, my task is to assist us through this transition. I trust that the framework will act as the catalyst to spark imagination and I look forward to joining you in the workshops.

THANK YOU VERY MUCH

Murray Haight

A COMPREHENSIVE FRAMEWORK FOR WASTE MANAGEMENT

I. ACTORS:

GOVERNMENT - 1) FEDERAL
2) PROVINCIAL
3) LOCAL - MUNICIPAL
REGIONAL

INDUSTRY - 1) EXTRACTION
2) MANUFACTURE
3) TRANSPORT
4) RECOVERY/DISPOSAL

PUBLIC - 1) INTEREST GROUPS
2) CITIZENS
3) INDIVIDUALS

II. PROCESS:

1) PLANNING - definition of problems, goals and objectives
- information gathering
- analysis/forecasting
- evaluation

2) IMPLEMENTATION - authorization
- construction
- operation
- perpetual care

3) MONITORING - surveillance
- inspection
- enforcement

III. KEYS TO OPERATION:

1) COMMUNICATION
2) RESPONSIBILITIES
3) EVALUATION

Introduction to Workshops

The main purpose of this conference was to allow those attending the opportunity to express to the Ministry of the Environment their concerns and suggestions on waste management in Ontario. To achieve this goal, most of the time at the conference was spent in workshop discussion groups.

The participants varied in their perception of the role that they could play at this stage of the Ministry's consultation process. The majority felt that, since they had not yet received proposals from the Ministry on the contents of the upcoming blueprint, their role at the conference was to express their concerns about current waste management practices and to make clear the principles that they felt should be applied in the drafting of the blueprint. Others expressed the desire to make detailed programme recommendations. Rarely, however, was the latter the outcome of the workshop discussions.

As the following compilation of the workshop suggestions shows, some basic principles of waste management received overwhelming support from all those attending the conference. On some questions, there were definite differences of opinions as to the most desirable approach; these issues were not resolved during the workshops. Many other suggestions were raised that did not receive widespread support. This does not necessarily mean, however, that those present would not endorse them; many of these were not considered by all participants simply because they were not thought of in each workshop or, if they were raised, there was not time to discuss them.

The suggestions that came out of the workshops are presented in categories according to the workshop headings. Undoubtedly, some ideas will have been missed in this compilation. We trust that a participant who notices such an omission will submit any additional ideas to the Ministry. We are confident, however, that the summary of these workshop sessions accurately reflects the major points.

Recycling, Reduction, Reuse

An overall feeling in all the workshops was that recycling, reduction and reuse are an essential part of a waste management strategy.

Some workshops took the importance of recycling, reduction and reuse as a given, and tried to work out ways of improving the amount of use and the effectiveness of this option. Other workshops tried to identify its relative importance in a waste management strategy; these workshops placed it as the high priority component. A hierarchy of waste management options was identified in one workshop. Reduction of waste was the number one priority; recycling and reuse were the next most acceptable; then waste destruction (incineration) or disposal (landfill) should be considered. Similar sentiments were expressed in other workshops. The following is just one example. A member of a public interest group stated, "The question of reduction, recycling and reuse is absolutely the key to waste management."

Current accounting methods not adequately reflecting the true costs of disposal were clearly seen in all workshops as a major barrier to full use of recycling, reuse and reduction. "It is cheaper to pollute than to recycle. That is the problem," said one citizens group representative.

This discrepancy in costs was seen as most serious in regard to landfills. In one workshop, it was suggested that "present landfill costs account for only one-half to one-third of real costs." The workshops identified the following landfill disposal costs not currently taken into account.:

- Perpetual care
- Social costs
- Purchase of land for replacement
- Environment damage

"Real rates (for disposal) would encourage recycling," said one person. There appeared to be a general feeling of support for the Ministry determining true costs of disposal. One municipal representative suggested "that the province should legislate municipalities to charge real costs."

In all workshops, education was stressed as a major avenue to pursue to encourage recycling. Many of the workshop groups identified particular types of education that were needed to encourage recycling, reuse and reduction. These included:

- Make available to industries, municipalities and individuals information about reduction, recycling and reuse successes; for example the Laidlaw experiment in Kitchener.

-"Provide information to municipalities to assist them in designing recycling programmes," suggested a university professor.
- Aim educational programmes on reduction, recycling and reuse at school children.
- Provide guidebooks to industry to make them aware of waste reduction, recycling and reuse opportunities.
- Educate the general public through television and other media.
- Inform the public of individual ways to reduce household waste. One suggestion was to publish average household garbage statistics, accompanied by statistics on how much household wastes can be reduced.
- Educate politicians on reduction, recycling and reuse.

Although the ideas for encouraging increased recycling varied widely, an overall sentiment was present that, as one industry representative said, "We want to create an environment where recycling is more important and attractive." According to the participants, the province should play an active role in developing an environment that will bring about greater use of recycling, reuse and reduction.

In addition to removing the disincentive to recycling, reuse and reduction created by artificially low disposal costs, and undertaking educational programmes, the following ideas were consistently discussed in the workshops as programmes the province could undertake.

The potential of legislation to force recycling was discussed in most workshops. The dominant feeling seemed to be that "the law is not a magic wand." Varying comments were made. "It is not practical for provinces or municipalities to force people to recycle," said one person. An industry representative remarked that "If you are going to legislate it, you can have it," indicating that ownership of waste should be tranferred to the province if recycling is forced.

Although there was agreement that legislation is not the solution for arriving at reduction, recycling and reuse, there were some suggestions as to when legislation could be considered to force some recycling. "People can't be forced but industry and municipalities can," said a representative of an environmental group. It was agreed in one workshop that with certain hazardous substances for which there is no adequate disposal method, but available recycling methods, legislation should be used to require recycling of that substance.

Some specific ideas were also generated on legislation that could encourage recycling, but did not involve forcing people to recycle their waste. One participant suggested that the Ministry of Environment approval of municipal landfills could be dependent on maximum use of recycling by the municipality.

A great deal of discussion took place on the non-legislative ways in which the province could support recycling, reduction and reuse. This sentiment was summarized by one workshop group: "The province should create an infrastructure to encourage recycling." A number of mechanisms were seen as the means to provide this type of support.

Marketing: In nearly all the workshop groups, marketing was identified as a major problem for recycling programmes. The lack of reliable markets discourages the setting up of recycling systems. One person working in the recycling industry said, "The province should concentrate on markets for recycled materials." There was consistent endorsement for the idea of the Ministry of the Environment taking a role in the identification, development and stabilization of recycled materials markets.

Technology: The need for technical assistance to municipalities and industries to help them recycle arose repeatedly. According to an industry representative, "a major way for the province to encourage reduction, recycling and reuse is through technical support." This role for the province seemed to have the acceptance of all the participants in the workshops in which it was discussed.

Standardization of Packaging: Much discussion focused on packaging and, as one participant described it, "the throw-away society." Some participants remarked that if packaging was standardized much less waste would be produced. For example, one industry representative said, "I don't think there should be disposable cans or bottles." No consensus developed on this issue. In one workshop, a number of public interest group people emphasized that there needed to be "a societal debate on the throwaway society and built in obsolescence."

Financial Support: Provincial financial support for reduction, recycling and reuse was discussed repeatedly. Some workshop groups felt that financial incentives were needed to encourage recycling while others felt that recycling made good economic sense and it would happen if financial disincentives such as cheap landfill were removed. The general feeling of the participants was that, although the province should provide assistance to help start up recycling operations, ongoing financial support was neither necessary nor desirable.

Curbside Residential Pickup: A strong feeling in the workshops was that residential recycling would only be effective if curbside pickup of separated garbage was arranged. Numerous references were made to the success of the Kitchener experiment.

In addition to the major topics already outlined, some other issues were identified:

1) Recycling vs. incineration for heat or energy recovery: Two workshop groups discussed this

issue and both appeared to be in agreement that recycling and reuse were better waste management options than incineration.

2) Waste Management Advisory Committees: Such committees could be set up on a regional basis to develop recycling, reuse and reduction programmes. It was suggested that this committee's representatives should be drawn from a wide spectrum of the community.
3) Municipalities could evaluate wastes going to their landfills and point out potentially recyclable materials.
4) Use portable waste reduction equipment.
5) Questions were raised about the understanding that sometimes transportation costs are higher for recycled materials than for virgin materials. If this disincentive exists, action should be taken to stop it.

Perpetual Care and Compensation

In most of the workshops, the topic of perpetual care was broken down into two categories: 1) care of new sites, and 2) care of old and existing sites.

There was an overriding sentiment that there needs to be a detailed plan for closure and perpetual care before new waste management facilities become operational. There was discussion in many of the workshops about what should be included in a perpetual care plan. Ideas included:

1) Leachate collection and treatment system,
2) Plans for monitoring after closure,
3) Engineering design for closure,
4) Restrictions on future land uses,
5) Posting of bond by the owner to cover closure,
6) Site owner obtaining insurance policy to cover costs in the event that problems develop. This ensures money would be available for remedial actions.

Although all groups seemed in agreement that all waste facilities should have a perpetual care plan, many discussions supported the idea that the perpetual care plan "could be varied according to the type of substance that is being handled." One industry representative remarked that in the long run simple municipal garbage can be quite hazardous; "it just takes a long time." In another group it was pointed out that "research is needed to know what is safe in the long term."

Participants in two workshops stated that the perpetual care plan should be included as part of the concerns at the public hearings on a site proposal and that the agreed to plan should be written in as part of the conditions in the certificate of approval. A municipal government representative said, "Perpetual care should be brought up in the forefront of the approvals process rather than after the site has been established or closed."

Summarizing the sentiments of many of the participants, one workshop participant asked, "Why hasn't the ministry's policy paper on perpetual care been enforced?"

Discussion of old and existing sites centred on four basic issues: 1) ongoing monitoring, 2) clean-up of problem sites, 3) funding of remedial action, and 4) compensation.

"Some mechanism should be in place to provide for continuous monitoring and care of landfill," stated one participant. This point was reinforced by an industry representative: "We are looking for a landfill which is fenced off and separate from society - with a monitoring system which keeps the site separate." This concern emerged constantly.

Debate arose in some of the workshops about the role various people should play in the monitoring programme. Some suggested that a third or neutral party could conduct, supervise or interpret monitoring. But a member of a citizen's group pointed out, "We are bothered when monitoring is done by an independent party who is not fully accountable to the public." In several workshops, it was felt that the community should be involved in the monitoring programme. Several mechanisms were suggested to provide for community involvement. These included making documents resulting from monitoring procedures public, providing a forum in which such information could be related to the public and setting up a monitoring committee composed of representatives from a cross-section of the community.

In one workshop, the following principle for cleanup of problem sites was agreed to: "The present owner is responsible for any contamination occurring, but the province should have programmes to either assist in or itself undertake cleanup programmes in order to get immediate action." This idea was generally accepted throughout all the workshops.

The question that constantly arose was how should remedial actions be funded? There was agreement on the need to create a special fund to be used for remedying problems that develop at closed or currently in use waste disposal sites. It was generally agreed that the fund would be used in the absence of liable parties or to provide a pool of money for cleanup until liability could be established and payments received from the liable parties.

In those workshops where it was discussed, there was agreement that the use of the fund should in no way reduce the liability of the owner of the site. One industry representative noted that he would like to see the Ministry official who granted the certificate of approval also have some liability.

Overwhelmingly, those present felt this fund should be financed by the users of existing waste disposal facilities, both private and public.

One of the reasons given by a municipal government representative for supporting user fees is that it would increase disposal costs and thus make recycling a more financially enticing option for waste producers. One industry representative said, "Six months from today we should charge a levy of two bucks a ton on anything that goes into a landfill anywhere. John Q. Public has disposed of this waste cheaply in the past - today is the day to pay."

It was suggested that instituting a user fee would require scales at all facilities which could pose financial problems for facility operators. A per capita tax was one possible solution or a general surcharge on municipal waste to recover this initial cost.

Although most participants agreed with the principle of "tipping fees" generating the fund, some participants discussed an additional producer tax. They felt that such a tax would be a further encouragement to recycle.

Others strongly opposed the idea of producer fees. Reasons given centred on the fact that the producer would pay when he disposed of the wastes if a special "tipping fee" was set up. One industry person pointed out that dependence on the tipping fee rather than a producer fee would encourage a company to recycle.

Two workshops discussed charging different rates according to the material deposited at a facility. For example, one person said that wastes taken to an "energy from waste" plant should be exempt from this tax.

Most workshops in addition to the question of a fund for remedial action discussed the need for a compensation fund for "victims" of waste management problems. One citizens group representative said, "We need a system for victims to claim from, because in some situations there may be no insurance or no current operator responsible - you'd want a fund to cover it." Workshop groups suggested that the compensation fund be administered by a board or panel. This board was clearly viewed as independent of the courts and, as two workshops suggested, "could be administered like the workmen's compensation fund." Opinions differed as to whether use of this fund should limit the possibility of individuals taking court actions.

Production and Classification

During discussion of production and classification a number of issues were raised consistently. There was a clear message that there needed to be greater information availability on the types and volumes of wastes generated.

A number of persons expressed the view that any waste being generated should be recorded and classified. "It is information on production at the level of the generator that is important," stressed one industry person. Although there did not appear to be much disagreement with the issue of "registration of waste generators", there appeared to be differences of opinion on who should get this information. Public interest and citizens groups representatives stressed the need for public access to information on waste production. "Public knowledge of waste streams will have a number of benefits," said a university professor. The benefits he stated included, "one, for the purposes of waste exchange and two, to identify the toxic substances which should be removed from the waste stream. The ministry should have the power to require industry and municipalities to make their waste streams public." A number of industry representatives, however, stressed the need for corporate confidentiality. For example, one said, "There are waste streams being produced that are related to a company's competitiveness and the information has to be protected. The government could be involved in screening this information."

Two workshop groups separated the issue of information disclosure of wastes on company property from those wastes entering the public domain, i.e. highway transportation. There appeared to be agreement that once wastes left the factory gate information about them should be publicly available. Much less agreement existed on the concept of publicly available information on wastes remaining on company property.

To summarize the sentiment, it seems that greater information availability is desired, particularly information on waste generation, but there is a concern about reconciling this principle with corporate confidentiality.

There was a public desire for more easily understandable and complete information on wastes. Concern was raised in a number of workshops that the current primary classification system, the waybill, was, in the words of one participant, "too ambiguous". Another person said, "The existing classification system...describes wastes in broad generalities and is therefore a rather crude compromise." "Categories such as acids were simply too broad," said one citizen participant. Questions were raised by some people about what objectives the waybill was designed to achieve.

Another central issue that emerged was that information concerning toxicity and hazards had to be better defined. The question of "hazardous" definitions was discussed thoroughly

in some of the workshops. One unionist expressed surprise "that there are no definitions of hazardous." The parameters for "hazardous" have to be clearly laid out, many people stated. These definitions should be developed with input from citizens, industry and the Ministry of the Environment, according to some participants.

Both the public and industry expressed a significant need for an understanding of the hazards of various substances and definitions of acceptable treatment of wastes. A labour representative remarked "The MOE should be empowered to say no you can't do that if waste is harmful."

It was suggested that the MOE and OWMC classifications system for wastes had to be similar. One participant suggested "the MOE sit down with the OWMC to discuss establishing a common system." This idea was favourably received in the workshops where it was discussed.

Another major thought discussed at length in some workshops and briefly in others was the concept of new plants being required to quantify and classify their expected wastes and demonstrate that these wastes can be managed acceptably. One industry representative said, "Acceptable waste treatment should be demonstrated. It is not as big a thing as it sounds." It was suggested that this prior declaration of expected wastes could allow the MOE to assist the company in developing ways of preventing wastes from being produced.

Two other issues were commented upon at great length in one workshop. The first of these, hazardous household garbage, was identified by some participants as an overlooked issue. Ideas for addressing the problem included providing municipal receptacles for hazardous household materials and better labelling about hazards.

The last point touched on in many of the workshops and discussed thoroughly in one was the issue of packaging. The often alluded to case of aluminum cans is evidence of this concern. Packaging standards were identified as an important component of waste management since these affect waste production and waste reduction potential.

Approvals, Controls, Standards and Regulations

In all workshops, there was agreement that the public must be involved in decisions around waste management at the preliminary stages. Early public involvement in the following aspects of decision making were suggested: 1) the process of choosing sites for waste disposal, 2) the evaluation of proposals for waste management facilities, and 3) the development of standards and regulations for application all across the province. The details of these suggestions were discussed to different degrees in the various workshops. It was emphasized that consultation prior to the public hearings would streamline the process lessening the focus upon hearings. One person suggested that, "if they took the animosity and adversarial roles out of hearings and the experts sat down before and tried to get their minds in tune to the best safe solution, we'd be much further ahead." Another reason given for early public involvement was "to give the public a chance to express their concerns before the proponent has spent a lot of money on the project".

The two workshops that discussed involvement of the public in the preliminary process of standard setting suggested three methods: 1) preliminary meetings of a group representative of the various interested sectors before a proposal is drawn up to suggest what types of concerns should be dealt with in the regulations or standards, 2) a notice and comment period after a specific proposal has been set forward, 3) a public hearing by a panel of experts.

Throughout the workshops, various proposals were made for early public involvement. One workshop developed a more detailed suggestion than did the others. This idea was referred to as the "stakeholders" model. It was agreed to unanimously. They described the process as follows:

1) A stakeholders group made up of representatives from all the interested parties is drawn together.
2) At the first stakeholders meetings, the public expresses to the proponent of a facility their concerns about such operations in their community and lists questions that they want to see studied in order to assure them that the best route is being followed.
   In the case of regulation or standard setting, at this stage the stakeholders group would express to the Ministry what they would like to see addressed in the regulation.
3) The proponent or regulation developer would then conduct more detailed studies and develop a specific proposal.
4) This proposal would then come back to the stakeholders group for further comment.
5) The proponent would then further refine its proposal.

6) The normal public hearing or notification process would now be carried out.

Throughout the workshops there was a strong expression of regret that the Environment Assessment Act is not used more consistently. Commenting on the frequency with which exemptions are granted from the requirements for a public hearing under this act, one participant asked, "Why does the Act exist?" Full use of the Act was wanted because of its provisions for public hearings which "provide an open and formal airing of everything," and because it broadened the types of considerations that must be made in evaluating a proposal. Commenting on the impacts that extension of the Environmental Assessment Act to the private sector would have, one industry representative said, "The E.A. Act being applied to private sector will cause initial shock but if municipalities and industries are treated equally and if the process was streamlined enough then it would be accepted."

The following are suggestions that were made for revisions in the EAA by some of those present:

1) Include all proposals for waste management facilities, by both private and public sector proponents, under this Act. Some people, however, felt that exemptions could be considered because of excessive costs, for small facilities for example.
2) Make all evidence available to all parties to the hearing prior to the beginning of the public hearings.

Public interest groups raised concern about the relationship between the ministry and the members of the hearing board. They urged more separation between the two and stated that they were not satisfied with the way in which appointments are made to the board.

Dissatisfactions were also expressed by some people with the role the Ministry takes at public hearings. They recommend that the ministry take a more active and more neutral role in the hearings. They felt that too often the ministry stays behind the scenes at these hearings, but at the same time has been working with the proponent in preparing them for the hearings.

A lot of concern was expressed by citizens, industry and municipalities about the length and cost of hearings. For example an industry person said, "It is very frustrating to have to return 11-12 times to discuss the specifics of landfill establishment and go through the requirements of hearings and approvals."

Many people suggested that the process for obtaining certificates of approval could vary according to the nature of the wastes being handled; for example, some people said, "recycling facilities should be required to obtain a certificate of approval

but should not be required to go through the 'big hearing approach'". The procedures and the requirements should be "more rigorous for the handling of hazardous wastes," said one citizen representative. Frequently it was said that the process could be streamlined to speed up the process for obtaining operating licences for less hazardous operations. There was not agreement on this principle, however, since some felt we could not be sure that all wastes were not hazardous.

In this discussion of the approvals process, considerable feeling was expressed that standards needed to be set out more clearly. The following statement from an industry representative was typical:

> If the Ministry of the Environment would tell us or the municipalities what they want, what standards they want, soil conditions, etc., so that we can come and say "yes we have met this standard, here is a slight variation we want." ... But tell us what you want!

Suggestions arose in some workshops for development of standards for transportation of hazardous wastes, and for waste containers.

Discussions took place on problems that citizens groups encounter when they attempt to participate in the decision-making process. One concern raised was the difficulty of obtaining information. In one workshop it was recommended that information on the proposed facility be made available well before the public hearing stage. It was also recommended that the means to obtain information be made more widely known, i.e. by distributing important telephone numbers.

The costs of participating in public hearings were discussed in several workshops. One citizens group stated that it had had to raise $26,000 for a hearing before the Environmental Assessment Board. While all were sympathetic to the problem, there was disagreement as to how this problem could be avoided. The basic contrast of views was as follows:

> "You have to allow the local community to determine how important the issue is to them, and therefore should rely on local fundraising."

> "I have problems with people having to dig into their own pockets. They are already making sacrifices of time, etc. And besides, how can they ever raise as much money as the proponent company or government can draw upon?"

The majority view in those workshops that discussed the issue was that the burden should be upon the local people to do substantial fundraising. These participants recommended that

there be incentive-type funding with the government matching dollar for dollar money raised by the local people. There also was the suggestion that donations made to such groups be made tax deductible.

In one workshop, it was felt that a major problem for citizens groups was the cost of getting experts to testify at public hearings. This workshop recommended that the hearing board pay all costs of bringing experts into the public hearings. Control could be maintained on the level of these costs by having all interested parties submit names of experts in the field that they would like to have present at the hearings. The hearing board could then choose expert witnesses from those lists making sure that they had included people from each of the divergent views.

Two suggestions mentioned in one workshop, but not discussed, were environmental mediation and a bill of rights for the community where a waste facility is located.

A strong theme of this workshop topic was that the best intentions of regulations, standards and certificates of approval will not be met unless there is adequate monitoring. All the workshops agreed that the primary responsibility for monitoring should lie with the Ministry of the Environment. In one workshop it was suggested that the Ministry be assisted in this task by other ministries, especially the Ministry of Labour. Twice it was suggested that the local Medical Officer of Health play a role in monitoring.

Two of the three workshops that discussed monitoring methods said that there should be a role for the public in this process. The example of Harwich Township was discussed where a monitoring committee has been set up by the Ministry of the Environment with representation from the Ministry, the operator of the site, the local citizens group, the municipality and the general public on it. This committee meets regularly to inspect the site and to review monitoring data. In endorsing this suggestion, one industry representative said: "Without such a committee neither the operator nor the ministry can be sure what your (the public's) priorities are."

In two workshops, it was suggested that the person who made a complaint should be invited to go with the Ministry inspector to inspect the site. Regardless of whether the complainant goes on the inspection, some people said the Ministry should automatically send a copy of the inspector's report to the person.

Some people stressed the need for regular evaluation of regulations and standards to ascertain whether they are fulfilling the objectives they were intended for. The public should be involved in this assessment process, according to those who raised the concern.

The methods for enforcing regulations and standards were not discussed in detail in most workshops. The workshops were in agreement, however, on the need for strict and uniform enforcement. It was pointed out that the basis for adequate enforcement was carefully designed regulations. In addition, representatives from a range of groups stressed that careful examination of proponents before they are allowed to enter the waste management business is the best way to avoid later enforcement problems. The words of a person from industry best summed up the dominant feeling: "Set the standards and then enforce them."

In the two workshops where the question of enforcement was most thoroughly discussed, there was agreement that each of the following mechanisms should be used depending upon the severity of the violation and the intransigence of the violator: negotiation of changes, issuance of a control order to require changes in the operation, legal prosecutions and fines, and, in extreme cases, revocation of the certificate of approval thus removing the owner's right to carry on the operation.

Some concerns were raised about the current use of negotiations as an enforcement mechanism. It was agreed that this was the necessary first step, but some citizens felt that the negotiation process sometimes went on much too long and in effect became an acceptance of the present unsatisfactory situation. It was also felt by a public interest group representative that the negotiations should be made known to the public.

In instances where a waste management operator has had a particularly poor record, two industry representatives suggested that the Ministry should appoint a fulltime inspector to the site for a given period of time (perhaps one year) and should assess the company for the inspection costs.

Two other suggestions were that the size of fines be increased ("Hit them in the pocket book") and that the names of those who have been successfully prosecuted for violating waste management regulations be published.

Final Plenary

A final plenary meeting took place at the end of the day and a half consultation session. Discussion at the plenary focussed on the questions that were foremost in everyone's mind: What will the Ministry do with the ideas generated at this conference? and, What opportunities will the public have for further input to the blueprint?

The Ministry was requested to prepare a written response to the sessions for inclusion in this report; however, this idea was not popular with the Ministry as it was felt the blueprint would be the ultimate response to the sessions and also that the MOE representatives had taken part in the workshops and plenaries in order to provide a direct response to the sessions.

The co-ordinator of the MOE Waste Management blueprint development program stated that the information from this session, and from other sources, would be used by the MOE to create a draft blueprint which would be released in June of this year. He then said, "What we would really like to hear now is how you would best see us involving you after the blueprint comes out."

The first, and most often repeated suggestion, was that those present at this consultation session receive a copy of the blueprint as soon as it is released. One citizen's group representative explained, "For my own interest I would like to see how much of what we said here got into that initial draft."

Another widely supported suggestion was that a consultation session on the blueprint itself be held in September with the same group of people who attended this meeting. It was proposed that, in preparation for this meeting, conference attendees could send their comments on the blueprint to the session organizers for distribution to all participants before the meetings begin.

In addition, the Ministry was urged to mail the blueprint, together with a summary and schedule of further meetings, to concerned groups and individuals across the province. The Ministry was asked to commit itself to a series of public meetings to facilitate input from a truly representative cross-section of the citizens of Ontario. It was also suggested that the MOE could encourage participation by providing funding for those who might not otherwise be able to take part.

A few of the conference attendees questioned whether the conference would have any concrete impact on the blueprint. While assuring everyone that their input during the past day and a half would have an effect on the Ministry's programmes,

the Co-ordinator of the Waste Management blueprint development program said, "I think it (public consultation sessions) is something we should have been doing long before now. I am very, very pleased with the input we have gotten here... I really think it is something we can go back with now and consider very, very seriously."

Appendix A

Organizing the Conference

The following description of how the session is organized is provided in the hope that it may be of use to another group organizing a similar conference.

On Friday, January 7, 1983 the Ontario Ministry of the Environment (MOE) approached three organizations to submit proposals for a consultative session "to identify concerns, limitations and problems with the current waste management legislation, regulations, policies and programs...and...to develop suggestions for corrections of the above". The reason for this consultation was the MOE's commitment to producing a "blueprint for waste management in Ontario" (Ontario MOE 1982 and Norton 1982).

The proposals for the consultation session had to be submitted to the MOE by January 13th. In order to prepare WPIRG's proposal a planning committee was struck which consisted of students and staff from WPIRG, several University of Waterloo faculty, and several other interested undergraduate and graduate students. By the 13th, a proposed budget and schedules had been submitted to the MOE. The input WPIRG received from the members of the planning committee throughout the conference planning was instrumental in developing the session programme.

On Monday, January 17th WPIRG was informed that its proposal had been accepted by the MOE. The first of several meetings with MOE personnel took place two days later to confirm the organizational arrangements. In particular the MOE had input to the session's format, the questions considered in the workshops, and the groups invited, although the final decisions were made by WPIRG. Several meetings of the planning committee also took place in the days following our receiving notification that we were to organize the session. The session timetable was finalized early on and is reproduced earlier in this report. As the consultative session was scheduled to take place on February 23rd and 24th, 1983, the organizers had to move quickly. It is certainly to be hoped that any further consultations will not be organized on such short notice.

It was recognized that while the planning committee could be very useful in terms of providing advice and suggestions, they were not in a position to actually organize the session. A management committee of three people (one paid full-time, one three-quarter time, and one volunteer) was created and charged with ensuring that the session took place.

Next to the format and content of the session and workshops (which were formalized with the planning committee), the most important task was considered to be that of identifying and confirming the attendees. In determining whom to invite the

primary consideration was to obtain approximately equal representation from each of four groups - government, business and industry, environmental and citizen's groups, and others (e.g. academics, Ontario Federation of Agriculture). Within each of the four groups we tried to obtain representation from organizations across the province. The organizations that were asked to send representatives were chosen on the basis of recommendations from various directories and almanacs, and from the knowledge gained in organizing WPIRG's hazardous waste conference (Fleiss, Jackson and Weller, 1983). A list of those who actually attended and their affiliations and addresses is given in Appendix D.

The organizations selected to send representatives were contacted by telephone and a preliminary mailing was sent to them introducing the session. As soon as a representative had been confirmed the main information package was sent by courier (MOE 1979, 1982 and undated, Norton 1982 and a list of questions that might be addressed in each of the workshops - Appendix B). The most common difficulty experienced in confirming the session attendees was that an organization's representatives often had prior commitments because of the short notice time.

While one organizer was concerned with contacting potential attendees, another concentrated on identifying, meeting with, and preparing the persons who were to give the case-study presentations. This person was concerned with ensuring that the presentations would introduce the waste management issue by "providing a microcosm of the problem of waste management in Ontario and ensuring that the workshops and discussions that followed would be focused on the actual effects of the provincial policies, regulations, legislation, and programs" (WPIRG conference proposal to MOE).

The same organizer was responsible for briefing the workshop chairpeople to ensure that they would facilitate the discussions in a reasonably standard format. The chairpeople were chosen from the planning committee as they were considered to be persons who had a good knowledge of the goals and methods of the session, some additional knowledge of the waste management problem in Ontario, and previous experience in chairing similar workshops. Several meetings of the workshop chairpeople were held to delineate their responsibilities.

A third person made the hotel arrangements (meeting rooms, overnight rooms, meals, tape recorders, etc.) and a fourth set up the conference's books (including a voucher system for the travel expenses of subsidized attendees).

Meetings of the planning committee took place approximately weekly to discuss such things as format and content of the workshops, plenary sessions, and transitional address, preparation of the workshop topic questions to be mailed out, and discussions of the roles of the workshop chairpeople, the final report, etc.

The management committee met almost daily in order to keep each other up-to-date on each other's progress and to make the necessary decisions.

One task which was neglected somewhat in the planning stages of the conference was that of finding note-takers for the workshops. The results was that we had trouble finding note-takers and in fact were short one or two for most of the session. In another conference this should be rectified as good notes are very important, especially for writing a report.

When the attendees registered at the session, they were given a pre-typed nametag, a detailed schedule of workshop and meal times and locations, and assigned to a workshop group for the entire session. Vouchers were given to the environmental and citizen's group representatives whose travel and hotel accommodation costs were subsidized. Throughout the actual conference the organizers concerned themselves with making sure the sessions were running smoothly.

The ultimate purpose of this conference was to provide the MOE with public input on waste management practices in Ontario. As a followup to the conference a meeting of the organizers and MOE personnel took place the day after the session. Here the results of the workshops were discussed verbally. The Monday after the session (February 25th) a preliminary report, essentially confirming Friday's discussion, was submitted to the Ministry. The final report of the session was to be finished within three weeks of completion of the conference. The session reports were prepared from the workshop flip-charts, notes, and tapes with additional input from the workshop chairpeople. The report has been typed, xeroxed, and bound from a manuscript produced by the compilers. A copy has been sent to all those who attended the conference.

Looking back there are several things we would change or improve. There was the dearth of note-takers as observed above. The fact that about 10% of those who planned to attend could not make it, led to having fewer participants than hoped for. In future conferences this problem could be overcome by inviting more participants than you expect to attend. We would also try for greater representation from municipalities, consulting firms, users of recycled products, producers of waste and health officials. Further comments on the consultative session are provided in the summary of the conference evaluation forms (Appendix C). If you have any questions with regard to this conference, do not hesitate to contact WPIRG.

BIBLIOGRAPHY

Fleiss, Karen; John Jackson; and Phil Weller (1983) Hazardous Waste Management: The Decision-Making Problem, Report of a Conference held in Kitchener-Waterloo, Nov. 12 & 13, 1982 Waterloo:WPIRG

Norton, Keith (1982) Notes for an Address re: Waste Management: The Challenge of the 1980s to The Board of Trade of Metropolitan Toronto Toronto: Ontario MOE

Ontario Ministry of the Environment (1979) Perpetual Care for Waste Management Facilities: Interim Report Toronto: Ontario Ministry of the Environment

Ontario Ministry of the Environment (1982) About Waste Management Meeting The Challenges of the 1980s Toronto: Ontario Ministry of the Environment

Ontario Ministry of the Environment (undated) Guidelines for the Establishment, Operation, Management, Maintenance, and Closure of Landfilling Sites in Ontario Toronto: Ontario Ministry of the Environment

Appendix B

WORKSHOP QUESTIONS

Prior to the conference, the following questions outlining some concerns related to the workshop topics were sent to all those who were going to attend. These questions were only meant to stimulate thoughts before hand, not to define what actually would happen in each workshop.

QUESTIONS ON RECYCLING, REUSE AND REDUCTION

1) How critical is recycling, reuse and reduction in the overall waste management strategy? Where does it rank in importance with disposal options such as landfilling, incineration, etc? Should the stress on recycling, reuse, and reduction vary among household, industrial-commercial non-hazardous, and industrial-commercial hazardous wastes?

2) What are the factors that now encourage and discourage recycling, reuse and reduction?
   a) economic factors? (e.g. collection costs, problems of marketing recycled materials)
   b) psychological factors?
   c) government regulatory factors?
   d) convenience factors?

3) What responsibility should be assumed by each of the following in recycling, reuse and reduction? Should this responsibility vary by waste type?
   a) individuals?
   b) private corporations?
   c) local governments?
   d) provincial government?
   e) federal government?

4) What incentives should the provincial government give to encourage recycling, reuse and reduction?
   a) financial?
      tax incentives?
      grants?
      loans?
   b) expertise?
      on techniques?
      on availability?
   c) provision of recycling facilities?

5) What regulations should the provincial government put into force to require recycling, reuse and reduction?

QUESTIONS ON PERPETUAL CARE AND COMPENSATION

PERPETUAL CARE PLAN:
The Programme:
1) What should the components of a perpetual care plan be?
   a) detailed closure procedures?
   b) monitoring after closure?
      for how long?
      should it vary by type of facility?

1) continued:
   c) plan for cleanup if monitoring indicates problems?
   d) emergency action plan in event of spill, contamination, etc?
   e) alternate water supply?

2) What should be the responsibility of the operator (private or government) and of the provincial government in carrying out these plans?

3) What mechanisms should be provided for the public to assist in developing and monitoring the perpetual care plan?

Financial Aspect:
1) Should monies be set aside in advance to operate such a plan?

2) Should they be facility and site specific funds? a general province-wide fund? or both?

3) Who or what combination should pay for the fund?
   a) owners of waste disposal facilities?
   b) producers of wastes?
   c) producers of products? e.g. chemical producers as in the U.S. Superfund
   d) government?

COMPENSATION PROGRAMME:
1) Should there be a compensation fund to cover:
   a) cleanup costs incurred?
   b) damages as a result of contamination?

2) Who should be eligible to receive money from the fund?
   a) government?
   b) individuals?

3) Should recipients of compensation funds retain the right to sue?

4) How should the fund be financed?

QUESTIONS ON PRODUCTION AND CLASSIFICATION

PRODUCTION:
1) Should there be mechanisms for government and/or the public to have input into decisions that affect the production of wastes? If so, how could this be achieved?

CLASSIFICATION:
1) What purposes should a system of classifying wastes achieve?

2) To what extent does the current waybill system achieve these objectives?

3) What additional mechanisms and/or changes in the waybill system should be put into place to achieve these objectives?

QUESTIONS ON APPROVALS, CONTROLS, STANDARDS, REGULATIONS

APPROVALS:

1) What process should be carried out for approving waste management operations?

2) What mechanisms should exist within this process for public input?

3) Should the approvals process and public input mechanisms differ according to the type of waste being treated (household, commercial-industrial non-hazardous, commercial-industrial hazardous, liquid industrial, sewage sludge)? Should it differ according to the type of waste management operation (incinerator, landfill, chemical/physical treatment plant, sewage treatment, recycling operations, on site operations, waste transportation)?

4) In each type of approval, what factors should be considered and how should these be weighted?

CONTROLS:

1) What mechanisms should the provincial government use to monitor the following aspects of waste management?
   a) waste disposal sites?
   b) waste transportation?
   c) waste handling at point of production?

2) What responsibility should the municipal government play in monitoring?

3) What responsibility should the public play in monitoring?

4) If mishandling of wastes is discovered, what action should the provincial government take?
   a) negotiation with violator?
   b) control orders?
   c) legal prosection and fines?
   d) revocation of certificate of approval?

STANDARDS:

1) What should standards and guidelines be set for?
   a) quality and quantity of effluent from waste disposal site?
   b) water quality?
   c) air quality?
   d) quality and design of equipment used in operation?
   e) nature of location of facility?

2) How should standards be set?
   a) role of scientists?
   b) role of public?
   c) role of industry?
   d) role of different governments?

3) How should standards be achieved?
   a) through negotiations?
   b) insertion into certificates of approval?
   c) through control orders?
   d) by making them into regulations?

REGULATIONS:
1) What should be included in regulations?

2) What process should the government go through in arriving at regulations? What should the mechanisms for public input be?

Appendix C

Summary of the Conference Evaluation Forms

Seventeen forms were received by the time this had to be typed. Not all respondents answered every question; some elaborated more than others. Supplementary comments are quoted under the appropriate question. Comments without a number after them indicate they were specifically mentioned by only one respondent.

1. What were your main objectives in attending the conference?

   To share information - 5
   To gain knowledge/learn - 7
   To gain insight into other perspectives on the problem - 5
   To communicate concerns to the Ministry of the Environment - 9
   Were these objectives met?
   Yes - 7 No - 0

2. Please indicate your affiliation:

   Environmental Organization - 5
   Citizen's Organization - 4
   Public Interest Group - 3
   Government - 3
   Industry - 2

3. Which workshop were you in?

   Group A - 4 Group B - 5 Group C - 2 Group D - 3 Group E - 3

4. Were you able to express your ideas and concerns?

   Yes - 16 No - 0 Some - 1

5. Were useful ways of dealing with your concerns suggested?

   Yes - 13 No - 1 Some - 2

6. Will you be able to act on any of these suggestions?

   Yes - 4 No - 1 Some - 4 Not sure - 4

7. Were there any concerns you had that you feel were not adequately dealt with in the workshop sessions?

   Yes - 4 No - 1

   What were these?

   - the facility the OWMC is planning to build and the regulations and definitions that need to be in place when the facility is ready
   - the portable waste decontamination facilities

7. continued

- the need to learn from past mistakes - how do you tell the Ministry of the Environment to use what is already in place?
- industry was dealt with in more detail than household waste, recycling, etc.
- the Environmental Assessment Procedure
- solutions were not always evident

8. What other thoughts do you have on the workshop you attended?

- sessions very informative - could have used more details of the blueprint - (3)
- should have been a summary of each session by the chairpersons at the final session - (2)
- not sure some chairpeople reflected consensus of the group
- the group was very positive, open-minded, co-operative, and successful
- more lead-time and advance material could have brought people up to the same level of understanding
- some focus problems; surprised at the level of interest maintained - (2)

9. Were these presentations valuable? Informative? Please explain.

Yes - 15 No - 1
Informative - 4 Lengthy - 3

10. Was the Transition Address helpful? If so, in what way?

Yes - 8 No - 7
Well organized Handout was enough

11. Were the workshop sessions informative? Useful?

Yes - 15 No - 0

12. Were the workshop sessions too long/ too short? Just right?

Long - 2 Short - 0 Just right - 13
- last ones seemed too long - (2)

13. Was the Final Plenary Session informative/ useful/ exciting? Please explain.

informative - 5 useful - 5 exciting - 2
- addressed the right question

14. The meal arrangements were:

a) Poor	0
b) Satisfactory	6
c) Very Good	11

- poolside meals poor due to chlorine smell
- how about a vegetarian meal?

15. Conference accomodations were:

a)	Poor	0
b)	Satisfactory	7
c)	Very Good	8

16. The length of the conference was:

a)	Too Short	2
b)	Just Right	13
c)	Too Long	1

17. How could the conference have been improved?

- more and better advance material - (2)
- some discussions rambled
- discussion of technical matters was avoided - these areas too must receive public scrutiny
- tighten up case studies, drop transition address
- separate household and hazardous wastes into two conferences
- any reason why Waste Management Advisory Board was not very prominent?

18. Were you able to gain an understanding about the concerns of other organizations?

Yes - 17
- this was the main value of the workshops - (2)

19. Were your concerns adequately dealt with?

Yes - 12 We'll see - 1

- they were discussed but were they dealt with?
- as much as time allowed
- the province is opting out of concern with low level radio-active waste

20. Were your concerns linked with those of others?

Yes - 14 Some - 2

21. Would you be interested in being involved in a working group to take the ideas that came out of the conference further?

Yes - 16 No - 0 Maybe - 1

22. What follow-up action do you suggest we take?

- send attendees a copy of the blueprint to study and comment upon and then meet again in September - (7)
- government support so that the public can be adequately informed by the representative groups
- the need for sufficient time to comment on the blueprint
- analysis and standardization of approvals etc.
- list the records of the workshops and actions that might be taken

23. Was the conference of value to you? In what ways?

Yes - 12 No - 0

- insight into different areas of waste management and from different points of view - (6)
- educational - (2)
- being able to participate in an advisory conference to the Ministry of the Environment
- being able to discuss issues in a relaxed atmosphere
- it was an incentive to study and learn more

24. Were you satisfied with this session as a part of the Ministry of Environment Public Consultation Process?

Yes - 17 No - 0

As long as the conference results and concerns are reflected in the blueprint - (4)

Appendix D

Conference Attendees

Allan, Bill

Waterloo Public Interest Research Group, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 884-9020

Armstrong, Tom

Co-ordinator, Waste Management Section, Ontario Ministry of the Environment, 135 St. Clair Avenue West, 2nd Floor, Toronto, Ontario M4V 1P5 (416) 965-9670

Balfour, Bill

Manager, Municipal and Private Section, Waste Management Branch, Ontario Ministry of the Environment, 135 St. Clair Avenue West, 2nd Floor, Toronto, Ontario M4V 1P5 (416) 965-5788

Boyko, Boris

Assistant Director, Waste Management Branch, Ontario Ministry of the Environment, 135 St. Clair Avenue West, 2nd Floor, Toronto, Ontario M4V 1P5 (416) 965-9668

Bradley, Ken

Canadian Chemical Producers' Association, (Uniroyal Chemical Box 250, Elmira, Ontario N3B 3A3 (519) 669-1671)

Bray, John

Manager, Municipal and Private Abatement, Southwest Region Ontario Ministry of the Environment, 985 Adelaide Street South, London, Ontario N6E 1V3 (519) 681-3600

Cengarle, Pauline

Concerned Citizens of Stouffville, (166 Church Street North, Stouffville, Ontario L0H 1L0 (416) 640-4649)

Cluff, Nancy

National Solid Waste Management Association, (Laidlaw Waste Systems Ltd., 1126 Fewster Drive, Mississauga, Ontario L4W 2A4 (416) 624-8353)

Condlln, Frank

Municipal Engineers' Association, (Chief Engineer, Waste Management, Region of Peel, 10 Peel Centre Drive, Brampton Ontario L6T 4B9 (416) 791-9400 ext. 377)

Curry, Dave

City of Ottawa, Director of Operations, 1355 Bank Street, Ottawa, Ontario K1H 8K7 (613) 725-3111

Daniels, Leslie

Better Understanding Committee, (46 Ormond Street South, Thorold, Ontario L2V 1Y4 (416) 227-7885)

Dickman, Michael

Department of Biology, Brock University, St. Catharines, Ontario L2S 3A1 (416) 688-5550

Dodds, Bill

Manager, Information Services, Ontario Ministry of the Environment, 135 St. Clair Avenue West, 2nd Floor, Toronto, Ontario M4V 1P5 (416) 965-7117

Eleen, John

Ontario Federation of Labour, 15 Gervais Drive, Don Mills, Ontario M3C 1Y8 (416) 441-2731

Fell, W. F.

Ontario Forest Industries Association, (Ontario Paper Company, Allenburg Road, Thorold, Ontario L2V 3Z5 (416) 227-1121)

Findlay, Rick

Environmental Protection Service, Environment Canada, 25 St. Clair Avenue East, Toronto, Ontario M4T 1M2 (416) 966-5840

Gervais, Hedy

Upper Ottawa Street Landfill Association, (42 James Street South, Hamilton, Ontario L8W 1M8 (416) 524-2434)

Gibson, Susan

Ontario Trucking Association, 555 Dixon Road, Rexdale, Ontario M9W 1H8 (416) 249-7401

Girty, Lynn

Ontario Federation of Agriculture, (R.R. #3, Blenheim, Ontario N0P 1A0 (519) 676-4131)

Gorman, Jane

Waterloo Region, Waste Management Advisory Committee, (549 Fallingbrook Drive, Waterloo, Ontario N1L 4N2 (519) 884-6782)

Guscott, Dave

Supervisor, Land Use Planning Approvals Section, Ontario Ministry of the Environment, 135 St. Clair Avenue West, 2nd Floor, Toronto, Ontario M4V 1P5 (416) 965-6963

Haight, Murray

School of Urban and Regional Planning, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 885-1211 ext. 3027

Harding, Gord

Municipal Engineers' Association, Committee of Public Works, (City of Windsor, Box 1607, Windsor, Ontario N9A 6S1 (519) 255-6500)

Hayter, Ron

Society of Plastics Industries of Canada, Suite 104, 1262 Don Mills Road, Don Mills, Ontario M3B 2W7 (416) 449-3444

Hemmarle, Don

Ontario Waste Management Association, (Big Bear Services, Suite 216, 50 Westmount Road North, Waterloo, Ontario N2L 2R4 (519) 886-4400)

Hodge, Randy

Student, School of Urban and Regional Planning, University of Waterloo, Waterloo, Ontario N2L 3G1

Hoffman, Doug

Conservation Council of Ontario, (School of Urban and Regional Planning, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 885-1211 ext. 3662)

Izumi, Kiyo

School of Urban and Regional Planning, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 885-1211 ext. 2144

Jackson, John

OPIRG - Windsor, (789 California Avenue, Windsor, Ontario N9B 2Z1 (519) 252-0603)

Kidd, Joanna

Pollution Probe, 12 Madison Avenue, Toronto, Ontario M5R 2S1 (416) 978-7152

Krauser, John

Ontario Medical Association, 240 St. George Street, Toronto, Ontario M5R 2P4 (416) 925-3264

Kruzins, Al

Canadian Manufacturers' Association, (Dofasco, P.O. Box 460, Hamilton, Ontario L8N 3J5 (416) 544-3761 ext. 3780)

Lalonde, C. A.

Toronto Board of Trade, (Manager, Liquids Division, Tricil Ltd., 89 Queensway West, Mississauga, Ontario L5B 2V2 (416) 270-8280)

Lawson, Pat

Conservation Council of Ontario, 45 Charles Street East, 6th Floor, Toronto, Ontario M9Y 1S2 (416) 961-6830

Lee, Brenda

Institute of Environmental Studies, University of Toronto, Toronto, Ontario M5A 1S4 (416) 978-7339

Lerner, Sally

Department of Man - Environment Studies, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 885-1211 ext. 3060

Ludolph, Nyle

Laidlaw Waste Systems Ltd., 155 Ardelt Street, Kitchener, Ontario N2G 3W9 (519) 744-3367

Mathers, Tanis

Consumer's Association of Ontario, (10 Brentwood Place, London, Ontario N6G 1X6 (519) 471-3460)

May, Sheila

Binbrook Anti-Dump Association, (R.R. #2, Binbrook, Ontario L0R 1C0 (416) 692-3150)

McGinnis, Jack

Resource Integration Systems Ltd., 467 Richmond Street East, Toronto, Ontario M5A 1R1 (416) 366-2578

Menich, Steve

Kitchener Chamber of Commerce, (Sutherland-Schultz Ltd., 859 Courtland Avenue East, Kitchener, Ontario N2C 1K4 (519) 743-4123)

Morrison, Sherry

Lambton Anti-Pollution Association, (R.R. #1, Mooretown, Ontario N0M 1M0 (519) 864-1059)

Murphy, John

Canadian Union of Public Employees, 824 Tecumseh Road East Windsor, Ontario N8X 2S3 (519) 253-7217

Newnham, Michael

Ontario Waste Management Corporation, 2 Bloor Street West, 11th Floor, Toronto, Ontario M4W 3E2 1- 800 268-1179

Patterson, Grace

Friends of Earth, (CELA, 8 York Street South, 5th Floor Toronto, Ontario M53 1R2 (416) 366-9717)

Randall, Barry

Waterloo PIRG, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 884-9020

Rodd, Stephen

Department of Agricultural Economics, University of Guelph, Guelph, Ontario N1G 2W1 (519) 824-4120 ext. 2766

Rosenblum, Simon

Sudbury Association for the Environment, (917 Elm Street West, Sudbury, Ontario P3C 1W3 (705) 673-8654)

Schuldt, Al

Canadian Steel Environmental Association, (Stelco Inc., 100 King Street West, Hamilton, Ontario L8N 3T1 (416) 528-2511)

Slocombe, D. Scott

Waterloo PIRG, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 885-1211 ext. 2578

Stewart, Jim

Liquid Waste Carriers Association, (Chemical and Petro Waste Disposal Ltd., 448 Dunlop Street West, Barrie, Ontario L4N 1C2 (705) 737-3411)

Taylor, Paul

Recycling Council of Ontario, 41 Laird Drive, Toronto, Ontario M4G 3T4 (416) 593-1756

Thompson, Gerry

Regional Muncipality of Waterloo, Marsland Centre, Waterloo, Ontario N2J 4G7 (519) 885-9488

Tierney, Dan

OPIRG - Guelph, University of Guelph, Guelph, Ontario N1G 2W1 (519) 824-2091

Tomen, Lillian

Citizens Rebelling Against Waste, (R.R. #2, Merlin, Ontario N0P 1W0 (519) 676-3765)

Vigod, Toby

Canadian Environmental Law Association, 8 York Street South, 5th Floor, Toronto, Ontario M53 1R2 (416) 366-9717

Waid, Joan

Tremain Britannia Group, (5703 Tremain Road, Milton, Ontario L9T 2X5 (416) 878-2980)

Weaver, Sylvia

Haldimand Norfolk Organization for a Pure Environment, (P.O. Box 10, R.R. #9, Dunnville, Ontario N1A 2W8 (416) 774-4132)

Weller, Phil

Waterloo PIRG, University of Waterloo, Waterloo, Ontario N2L 3G1 (519) 884-9020

Schedule of Appendices

1. Waste Management Consultation Session Report
2. Waste Reduction, Reuse, Recycling and Recovery Report
3. Perpetual Care Program Report
4. Interim Guideline for the Interpretation of the Hazardous Waste Definition (Regulation 309)
5. Legislative Implications of the Blueprint for Waste Management
6. Proposed Revisions to Regulation 309
7. Proposed Revisions to Regulation 313
8. Proposed Generator Regulation
9. Terms of Reference for a Waste Management Master Plan
10. Solid Waste Management Cost Accounting Summary Report
11. Proposed Regulation Under the Environmental Assessment Act Regarding Private Waste Disposal Sites